

**WASTE ACCEPTANCE CRITERIA  
ATTAINMENT REPORT FOR  
SOIL STOCKPILE 3**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT  
FERNALD, OHIO**



**MAY 2000**

**U.S. DEPARTMENT OF ENERGY  
FERNALD AREA OFFICE**

**20450-RP-0001  
REVISION 0  
FINAL**

**TABLE OF CONTENTS**

1.0	Introduction.....	1-1
2.0	Stockpile Description and Sampling Design.....	2-1
2.1	Stockpile Description.....	2-1
2.2	Real-Time Scanning .....	2-1
2.3	Physical Sampling.....	2-2
3.0	Data Summary and Conclusions.....	3-1
3.1	Real-Time Data.....	3-1
3.2	Field Screening Results .....	3-1
3.2.1	Beta/Gamma Screening Results .....	3-1
3.2.2	PID Screening Results .....	3-1
3.3	Analytical Data .....	3-1
3.4	Conclusion.....	3-1
	References.....	R-1
Appendix A	Variances/Field Change Notices to the Project Specific Plan for Sampling of Soil Stockpile 3 for OSDF WAC Attainment	

**LIST OF TABLES**

Table 3-1	Summary of HPGe Total Uranium Results
Table 3-2	Stockpile 3 Physical Sample Results

**LIST OF FIGURES**

Figure 3-1	SP-3 - RTRAK/RSS/HPGe Coverage Map
------------	------------------------------------

## LIST OF ACRONYMS AND ABBREVIATIONS

ccpm	corrected counts per minute
COCs	constituents of concern
HPGe	high-purity germanium (detector)
MDC	minimum detectable concentration
mg/kg	milligrams per kilogram
OSDF	On-Site Disposal Facility
pCi/g	picoCuries per gram
PID	photoionization detector
ppm	parts per million
PSP	Project Specific Plan
RMS	Radiation Measuring Systems
RSS	Radiological Scanning System
RTRAK	Radiation Tracking System
SP-3	Soil Stockpile 3
SWRB	Stormwater Retention Basin
VOC	volatile organic compound
WAC	waste acceptance criteria
WAO	Waste Acceptance Organization

## 1.0 INTRODUCTION

This report summarizes the recent sampling and analytical results for Soil Stockpile 3 (SP-3). Soil sampling was conducted to evaluate attainment of the On-Site Disposal Facility (OSDF) waste acceptance criteria (WAC). Excavation of the stockpile soil and debris is scheduled to begin in May 2000. WAC attainment will be visually verified by Waste Acceptance Organization (WAO) personnel during excavation.

Summaries of the strategies and methods for sampling for this stockpile are included in this report. The Project Specific Plan (PSP) for Sampling of SP-3 for OSDF WAC Attainment (DOE 2000) should be referenced for the complete background and/or specific details on sampling design and physical sampling activities for the attainment of WAC data.

## 2.0 STOCKPILE DESCRIPTION AND SAMPLING DESIGN

### 2.1 STOCKPILE DESCRIPTION

SP-3 (Material Tracking Location W800053) is located within Remediation Area 2, northeast of the Southern Waste Units and south of the Stormwater Retention Basins (SWRB). The SP-3 footprint is on a former softball field constructed in the early 1950s for use by site employees. Based on topographic survey measurements conducted in December 1999, the stockpile consists of approximately 54,000 cubic yards of soil and soil-like material. The stockpile was created in 1988 with the placement of excavated material from the SWRB project, and has grown to accommodate other excess soil generated from various previously uncontrolled areas. As determined in the PSP, the WAC constituents of concern (COCs) are total uranium and technetium-99, and the WAC limits are 82 parts per million (ppm) and 29.1 picoCuries per gram (pCi/g), respectively.

### 2.2 REAL-TIME SCANNING

A real-time total uranium surface scan of the stockpile was performed using the Radiation Measuring Systems (RMS) and high-purity germanium (HPGe) detectors. The real-time measurements covered as much of the stockpile surface as practical without jeopardizing worker safety. A few areas on SP-3 were inaccessible to all available real-time equipment (see Figure 3-1). Approximately 90 percent of the stockpile was covered by the RMS.

The RMS detector acquisition time was set to 4 seconds and data was collected at a speed of 1 mile per hour. The onboard Global Positioning System was used to obtain positioning information for each detector measurement. If any single RMS measurement had exceeded 721 milligrams per kilogram (mg/kg) total uranium, a HPGe measurement would have been taken to confirm the RMS measurement. The highest RMS reading was 103.3 mg/kg therefore, no HPGe confirmation measurements were needed for the stockpile.

The HPGe detector system spectral acquisition time was set to 300 seconds (5 minutes). The detector height was set at 1 meter above ground surface. All HPGe locations were surveyed. HPGe measurements were needed to complete surface coverage.

Infrared Moisture Meter soil moisture readings were collected in the area covered. These moisture readings were necessary to compensate for soil moisture as related to RMS and HPGe measurements.

### 2.3 PHYSICAL SAMPLING

The physical sampling strategy for WAC attainment determination for SP-3 was a combination of random and biased sampling throughout the stockpile. The number of samples determined necessary to adequately characterize SP-3 was based on the current data set, process knowledge of the stockpile, and sampling density in previous soil stockpile sampling projects. Based on these guidelines, 24 random sample locations were selected and 48 random sample intervals were collected from the stockpile.

To determine the locations and depths of random samples, a systematic approach was used to establish a sample grid over the stockpile surface. The grid pattern was based on surface area and consisted of 24 grid blocks of approximately equal size. A random sample location (northing and easting) was selected within each block. Depth intervals were randomly selected at each sampling location. Alternate random depths and alternate random locations were also selected in case of refusal at a boring location.

Biased samples were to be collected based on readings from a beta/gamma (Geiger-Mueller) survey meter. Six-inch soil intervals with beta/gamma readings above 400 corrected counts per minute (ccpm), as established in Appendix D of the Area 2, Phase I Integrated Remedial Design Package (DOE 1998), would have been collected and analyzed for total uranium. However, no beta/gamma readings exceeded 400 ccpm for this stockpile; thus, no biased radiological samples were collected.

In addition, biased samples were to be collected based on readings from a photoionization detector (PID). Six-inch soil intervals with a reading 5 ppm above-background would be collected and subjected to a headspace analysis. If the result from the headspace analysis was above 10 ppm, the sample interval would have been submitted for volatile organic compound (VOC) analysis. However, no PID readings exceeded 5 ppm above background; therefore, no biased VOC samples were collected.

Soil cores were collected using either a hand auger or the Geoprobe® Model 5400. Three of the 24 boring locations were moved to the alternate location due to debris or inaccessibility (i.e., steep hill side). One of the 24 boring locations was moved approximately 25 feet to the north, without crossing

grid lines. Both the original and alternate locations were inaccessible for the sampling team. All sample locations were moved in accordance with the PSP guidelines and documented in a Variance/Field Change Notice (Appendix A).

### 3.0 DATA SUMMARY AND CONCLUSIONS

#### 3.1 REAL-TIME DATA

Over 1614 measurements were acquired by the Radiation Tracking System (RTRAK), with the maximum result of 103.3 ppm. Over 536 measurements were acquired by the Radiation Scanning System (RSS), with the maximum result of 91.5 ppm. Twenty-one HPGe measurements were collected in areas which were inaccessible to the RTRAK and RSS. HPGe data are depicted in Table 3-1. RMS data are depicted in Figure 3-1.

#### 3.2 FIELD SCREENING RESULTS

##### 3.2.1 Beta/Gamma Screening Results

All borings collected at the sample locations were advanced to the 1 foot below the base of the pile and surveyed. All beta/gamma measurements were less than background.

##### 3.2.2 PID Screening Results

All borings collected at the sample locations were advanced to 1 foot below the base of the pile and screened with a PID. All PID concentrations were below background.

#### 3.3 ANALYTICAL DATA

The laboratory results of the soil samples are summarized in Tables 3-2 and 3-3. Results for total uranium analyses ranged from 1.37 ppm at SP3-11-42-R to 22.9 ppm at SP3-20-14-12-R.

Technetium-99 results ranged from nondetects (at less than 1 pCi/g) to 1.1 pCi/g at SP3-6-10-R.

#### 3.4 CONCLUSION

The evaluation of the real-time results, beta/gamma surveying results, PID screening results and sampling analytical results indicate SP-3 meets WAC and can be placed in the OSDF. Based on the low constituent concentrations throughout the pile, excavation monitoring with the RMS and/or HPGe will be conducted after approximately five days of excavation and radiological control monitoring will be necessary during excavation. WAO personnel will conduct visual inspection for prohibited items.



**TABLE 3-1**  
**SUMMARY OF HPG<sub>e</sub> TOTAL URANIUM RESULTS**

Location ID	Northing	Easting	Detector Height	Total Uranium (ppm)
SP3-1-G	477973.70	1348537.20	100cm	< MDC
SP3-2-G	477943.10	1348567.10	100cm	< MDC
SP3-3-G	477937.26	1348604.79	100cm	< MDC
SP3-4-G	477927.97	1348637.96	100cm	< MDC
SP3-5-G	477923.30	1348678.97	100cm	< MDC
SP3-6-G	477912.88	1348700.50	100cm	< MDC
SP3-7-G	477907.57	1348731.86	100cm	< MDC
SP3-8-G	477898.62	1348761.96	100cm	< MDC
SP3-9-G	477885.11	1348788.69	100cm	23.2
SP3-10-G	477929.40	1348715.51	100cm	< MDC
SP3-11-G	477942.34	1348692.36	100cm	0
SP3-12-G	477949.16	1348661.50	100cm	5.3
SP3-13-G	477952.19	1348625.26	100cm	9.58
SP3-14-G	478297.51	1348650.96	100cm	12.4
SP3-15-G	478278.61	1348637.45	100cm	11.4
SP3-16-G	478273.08	1348657.12	100cm	10.7
SP3-17-G	478290.55	1348669.53	100cm	11.5
SP3-18-G	478258.16	1348657.99	100cm	19.5
SP3-19-G	478275.75	1348696.89	100cm	6.78
SP3-20-G	478253.16	1348693.73	100cm	7.43
SP3-20-G-D	478253.16	1348693.73	100cm	< MDC
SP3-21-G	478231.73	1348707.54	100cm	9.49
SP3-21-D-G	478231.73	1348707.54	100cm	9.96

MDC- minimum detection concentration

**TABLE 3-2**  
**STOCKPILE 3 PHYSICAL SAMPLE RESULTS**

Sample ID	Sample Depths at Boring Location (feet)	Total Uranium (ppm)	Qualifier	Tech-99 (pCi/g)	Qualifier
SP3-1-1-R	0.0-0.5	4.5	-	0.78	U
SP3-2-9-R	4.0-4.5	2.17	NV	0.84	UNV
SP3-2-16-R	7.5-8.0	2.8	NV	0.93	UNV
SP3-3-1-R	0.0-0.5	3	-	0.91	U
SP3-3-10-R	4.5-5.0	3.06	-	0.88	U
SP3-4-1-R	0.0-0.5	5.5	-	0.86	U
SP3-5-5-R	2.0-2.5	11.2	-	0.84	U
SP3-5-12-R	5.5-6.0	10.2	-	0.86	U
SP3-6-10-R	4.5-5.0	12	NV	1.1	NV
SP3-6-15-R	7.0-7.5	3.06	NV	0.92	UNV
SP3-7-13-R	6.0-6.5	11.9	NV	0.77	UNV
SP3-7-24-R	11.5-12.0	2.06	NV	0.82	UNV
SP3-8-7-R	3.0-3.5	10.7	NV	0.97	UNV
SP3-8-9-R	4.0-4.5	10.9	NV	0.9	UNV
SP3-9-3-R	1.0-1.5	13.3	-	0.84	U
SP3-9-16-R	7.5-8.0	2.52	-	0.85	U
SP3-10-14-R	6.5-7.0	8.23	NV	1.4	UNV
SP3-10-34-R	16.5-17.0	2.7	NV	1.3	UNV
SP3-11-3-R	1.0-1.5	5.6	NV	0.84	UNV
SP3-11-21-R	10.0-10.5	1.85	NV	0.88	UNV
SP3-11-42-R	20.5-21.0	1.37	NV	1	UNV
SP3-12-12-R	5.5-6.0	14.9	NV	1.3	UNV
SP3-12-37-R	18.0-18.5	4.18	NV	1.3	UNV
SP3-13-1-R	0.0-0.5	3.27	-	0.88	U
SP3-13-17-R	8.0-8.5	7.95	-	0.77	U
SP3-14-3-R	1.0-1.5	6.36	NV	0.8	UNV
SP3-14-33-R	16.0-16.5	5.8	NV	1.2	UNV
SP3-14-52-R	25.5-26.0	3.44	NV	1.3	UNV
SP3-15-8-R	3.5-4.0	17.4	NV	0.9	UNV
SP3-15-34-R	16.5-17.0	15.3	NV	1.1	UNV
SP3-15-53-R	26.0-26.5	2.3	NV	0.85	UNV
SP3-16-4-R	1.5-2.0	2.7	NV	1	UNV
SP3-16-13-R	6.0-6.5	2.17	NV	1.1	UNV
SP3-17-3-R	1.0-1.5	8.51	NV	0.96	UNV
SP3-18-11-R	5.0-5.5	5.98	NV	1.3	UNV
SP3-18-17-R	8.0-8.5	6.92	NV	1.4	UNV
SP3-18-35-R	17.0-17.5	11.2	NV	1.2	UNV
SP3-19-10-R	4.5-5.0	4.36	NV	1.2	UNV
SP3-19-21-R	10.0-10.5	9.28	NV	1.2	UNV
SP3-19-42-R	20.5-21.0	2.47	NV	1.3	UNV
SP3-20-1-R	0.0-0.5	13.8	NV	0.95	UNV
SP3-20-14-R	6.5-7.0	22.9	NV	0.93	UNV
SP3-21-1-R	0.0-0.5	18	-	0.86	U
SP3-22-7-R	3.0-3.5	6.27	NV	0.87	UNV
SP3-23-9-R	4.0-4.5	17.8	NV	1	UNV
SP3-23-20-R	9.5-10.0	6.63	NV	1.1	UNV
SP3-24-6-R	2.5-3.0	5.55	NV	0.98	UNV
SP3-24-13-R	6.0-6.5	13	NV	0.93	UNV

U undetected at minimum detectable concentration (MDC)

UNV undetected at minimum detectable concentration, non validated

NV non validated

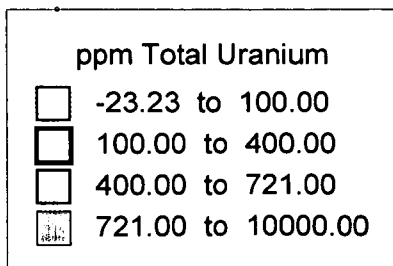
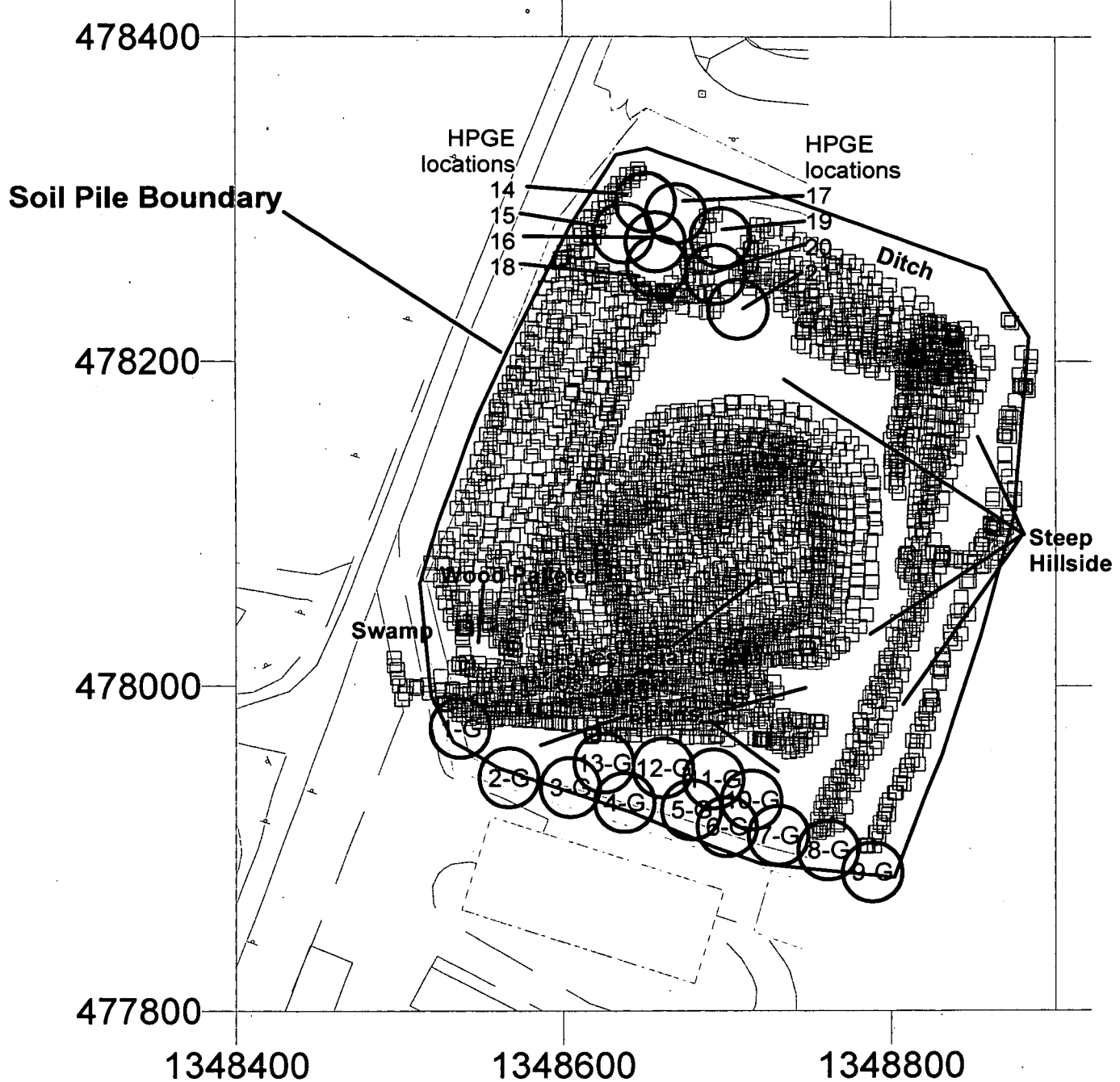
- no data qualifier for positive result

# Figure 3-1 STOCKPILE 3

Moisture Corrected Total Uranium  
 RSS batch # 552,553,554  
 RTRAK batch #785  
 Single Spectra in ppm  
 Coverage Plot (Field of View 2.4 m radius)  
 Measurement Dates: 3/1/00, 3/2/00, 3/7/00

30 2 6

N



RTIMP DWG Title: SP3-TU-1PT-MC  
 Project #: 20450-PSP-0002  
 Project Name: Sampling of Soil Pile 3 for WAC  
 Prepared By: David Allen  
 File: SP3\_TU\_1PT\_MC.srf  
 Date Prepared: 3/15/00

## REFERENCES

U.S. Department of Energy, 1998, "Area 2, Phase I Integrated Remedial Design Package," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.

U.S. Department of Energy, 2000, "Project Specific Plan for Sampling of Soil Stockpile 3 for OSDF WAC Attainment," Revision 0, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.

## **APPENDIX A**

### **VARIANCES/FIELD CHANGE NOTICES TO THE PROJECT SPECIFIC PLAN FOR SAMPLING OF SOIL STOCKPILE 3 FOR OSDF WAC ATTAINMENT**

## VARIANCE / FIELD CHANGE NOTICE

V/F 20450PSP2-1

WBS NO.: Project/Document/EDCD #20450-PSP-0002 Rev 0

Page 1 of 2

PROJECT TITLE: PSP for Sampling of Soil Stockpile 3 for OSDF WAC Attainment

Date 4/7/00

## VARIANCE / FIELD CHANGE NOTICE (Include justification):

Replace Table 2-1 with the attached table. This modified table includes the all the predesign analytes (total uranium, thorium-228, thorium-232, radium-226, and radium-228) and the correct sample mass required. The sample mass required is 300 grams.

3026

## Justification:

The predesign analytes (TAL C) require more sample mass for the lab to conduct their analysis.

REQUESTED BY: Deanna Diallo

Date: 4/7/00

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>[Signature]</i>	4-10-00	X	AREA 2 PROJECT MANAGER	4-10-00
	DATA QUALITY MANAGEMENT		X	SP3 Characterization Lead	4/7/00
X	<i>[Signature]</i>	04/07/00		RTIMP Manager	
	OTHER		X	Sampling Manager <i>[Signature]</i>	4/10/00
VARIANCE/FCN APPROVED [X] YES [ ] NO			REVISION REQUIRED: [ ] YES [x] NO		

## DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

14

**TABLE 2-1**  
**SAMPLING AND ANALYTICAL REQUIREMENTS**

Analyte	TAL	Sample Matrix	Lab	ASL*	Preservative	Holding Time	Container	Sample Mass (minimum)
Total Uranium Technetium-99	A, B	Solid	On-Site	B	None	12 months	250-ml plastic or glass	40 g
Total Uranium Technetium-99 Thorium-228 Thorium-232 Radium-226 Radium-228	C	Soil	On-Site	B	None	12 months	Plastic or glass	300 g
Bromodichloromethane 1,1-Dichloroethene Tetrachloroethene	D	Solid	Off-site	B	Cool to 2° to 6°C	14 days	60-ml widemouth glass with Teflon	Fill container to top (no head space)
Alpha/beta screen	N/A	Solid	On-site	N/A	None	None	Any container	10 g

\* Analytical Support Level

Notes: Sample container sizes for radiological samples may be changed in the field at the Field Sampling Lead's discretion.

The alpha/beta screen is only required for samples destined for off-site laboratories (TAL D). Off-site samples should be recorded on a separate Chain of Custody form from the on-site samples.

<b>VARIANCE / FIELD CHANGE NOTICE</b>		V/F 204500PSP2-1
WBS NO.: Project/Document #20450-PSP-0002, Rev. 0		Page 1 of 1
PROJECT TITLE: PSP For Sampling of SP 3 for OSDF WAC Attainment		Date 4/19/00

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Field Change Notice:

30 2 6

Sample locations were moved from the primary location due to inaccessibility and/or debris.

The following borings were moved to the alternate location listed in the PSP and the alternate sample intervals identified in the PSP were submitted:

SP3-8  
SP3-19  
SP3-22

Refer to Table C-2 in the PSP for the coordinate and depth interval information.

One boring was inaccessible at both the primary and alternate location. It was moved approximately 25 feet to the north of the primary location. The depth of the new location was calculated and new random intervals were generated. The following is the new coordinates and sample intervals:

Sample ID	Northing	Easting	Estimated Depth	Depth Interval
SP3-16-4-R	478100.52	1348816.20	15.7	1.5-2.0
SP2-16-13-R	478100.52	1348816.20	15.7	6.0-6.5

Justification:

Per Section 2.0 of the PSP, any primary location which is moved will be documented in a variance.

REQUESTED BY: Deanna Diallo  
Date: 4/19/00

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	<div style="display: flex; align-items: center;"> <div style="font-size: small; margin-right: 5px;">QUALITY ASSURANCE</div> <div style="flex-grow: 1;"> </div> </div>	4-20-00	X	<div style="display: flex; align-items: center;"> <div style="font-size: small; margin-right: 5px;">PROJECT MANAGER</div> <div style="flex-grow: 1;"> </div> </div>	4/19/00
	DATA QUALITY MANAGEMENT		X	<div style="display: flex; align-items: center;"> <div style="font-size: small; margin-right: 5px;">Characterization Lead</div> <div style="flex-grow: 1;"> </div> </div>	4/19/00
	ANALYTICAL CUSTOMER SUPPORT			RTIMP Manager	
X	<div style="display: flex; align-items: center;"> <div style="font-size: small; margin-right: 5px;">WAO</div> <div style="flex-grow: 1;"> </div> </div>	4/19/00	X	<div style="display: flex; align-items: center;"> <div style="font-size: small; margin-right: 5px;">Sampling Manager</div> <div style="flex-grow: 1;"> </div> </div>	4/20/00

VARIANCE/FCN APPROVED    ☒ YES    ☐ NO

REVISION REQUIRED:    ☐ YES    ☒ NO

#### DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Esther Dittmer	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

16



## VARIANCE / FIELD CHANGE NOTICE

V/F 20450PSP2-3

WBS NO.: Project/Document/ECDC # 20450-PSP-0002, Rev. 0

Page 1 of 2

PROJECT TITLE: PSP for Sampling of Soil SP3 for OSDF WAC Attainment

Date 5/15/00

3026

## VARIANCE / FIELD CHANGE NOTICE (Include justification):

The purpose of this variance is to provide direction for excavation monitoring of SP3. Rad-tech oversight coverage will be required at all times during excavation of SP3. Real-time measurements will be collected on the excavation surface area after approximately five days of excavation. The real-time measurements will be collected during the weekend or on a day where excavation is not occurring. All real-time measurements will be recorded on an Excavation Monitoring Form.

The RTRAK and RSS measurement identification is as follows:

SP3-X-265, where SP3 indicates Stockpile 3

X indicates the excavation area (sequential numbering)

265 indicates the batch number

The HPGe measurement identification is as follows:

SP3-X-Y-G, where SP3 indicates Stockpile 3

X indicates the excavation area (sequential numbering)

Y indicates the measurement for the excavation area (sequential numbering)

G indicates gamma measurement

If suspect above-WAC material is encountered during excavation and/or between lift scans, characterization of the excavated above-WAC footprint will be documented in a variance to the PSP.

All measurements will be collected and managed in accordance with the PSP. All trigger levels and confirmation/delineation requirements are specified in Section 3.0 of the PSP.

## Justification:

In response to an Ohio EPA comment on the WAC Attainment Report for SP3 stating excavation monitoring will not be conducted, excavation monitoring of the stockpile will be conducted as specified above.

REQUESTED BY: Deanna Diallo

Date: 5/15/00

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>Paul Thompson</i>	5/15/00	X	PROJECT MANAGER <i>SLC</i>	5/15/00
	DATA QUALITY MANAGEMENT		X	Characterization Lead <i>Deanna Diallo</i>	5/15/00
	ANALYTICAL CUSTOMER SUPPORT		X	RTIMP Manager <i>Jan H. Helle</i>	5/15/00
X	WAO <i>Deanna Diallo</i>	5/15/00		Sampling Manager	

VARIANCE/FCN APPROVED [X] YES [ ] NO

REVISION REQUIRED: [ ] YES [x] NO

## DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

17

<b>1. Area Description:</b> _____ <b>Area ID (e.g. Lift Area / SA /other):</b> _____  <b>Comments:</b> _____ <b>PWID #:</b> _____																									
<b>2. Section 1 - Data Collection</b> Equipment Used: <input type="checkbox"/> RTRAK <input type="checkbox"/> RSS <input type="checkbox"/> GATOR <input type="checkbox"/> HPGe                  Unit No: _____  Calibration Acceptable <input type="checkbox"/> Yes              Date: _____ <i>Note: If not in calibration, do not use equipment until calibration is acceptable</i>																									
<b>3. RTRAK / RSS / GATOR</b>  Location Map attached? <input type="checkbox"/> Yes <input type="checkbox"/> No  List of Batch #: _____  Coverage in accordance with PSP? <input type="checkbox"/> Yes <input type="checkbox"/> No  If "No": <input type="checkbox"/> Equipment Malfunction <input type="checkbox"/> Weather <input type="checkbox"/> Rough Terrain <input type="checkbox"/> Standing Water <input type="checkbox"/> Other: _____  Data Verification Checklist attached? <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>4. HPGe</b>  Summary Data Report attached? <input type="checkbox"/> Yes <input type="checkbox"/> No Location Map attached? <input type="checkbox"/> Yes <input type="checkbox"/> No  List of Data Points if Summary Data Report is not attached: <table style="width: 100%; border-top: 1px solid black; border-bottom: 1px solid black;"> <thead> <tr> <th style="text-align: left;"><u>Identifier</u></th> <th style="text-align: center;"><u>Total Uranium Result (ppm)</u></th> <th style="text-align: left;"><u>Identifier</u></th> <th style="text-align: center;"><u>Total Uranium Result (ppm)</u></th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> Data Verification Checklist attached? <input type="checkbox"/> Yes <input type="checkbox"/> No	<u>Identifier</u>	<u>Total Uranium Result (ppm)</u>	<u>Identifier</u>	<u>Total Uranium Result (ppm)</u>																				
<u>Identifier</u>	<u>Total Uranium Result (ppm)</u>	<u>Identifier</u>	<u>Total Uranium Result (ppm)</u>																						
<b>5. This signature indicates the data generated for this area by this equipment on this day is correct and valid within the confines of equipment performance and as defined in PSP #: _____</b>  Name: _____ <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(Printed)</span> <span>(Signature)</span> <span>(Signature Date)</span> </div>																									
<b>6. Section 2 - Characterization</b> Review real-time data Sufficient real-time coverage? <input type="checkbox"/> Yes <input type="checkbox"/> No Further action required: _____ All data points < total uranium WAC? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, define > WAC area(s) and extent with HPGe if applicable (see attached real-time map) as defined in PSP. Comments (if required): _____ <hr/> <p>The signature indicates this area has been characterized using the real-time data generated in Section 1 above and in accordance with PSP listed in Box 5.</p> Name: _____ <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(Printed)</span> <span>(Signature)</span> <span>(Signature Date)</span> </div>																									
<b>7. Section 3 - WAO</b> Review attached documentation <input type="checkbox"/> Yes                      MTL Designation: _____  This signature indicates this area can be excavated and dispositioned in accordance with the characterization provided in Section 2 above. <input type="checkbox"/> Yes <input type="checkbox"/> No and Reason: _____  Name: _____ <div style="display: flex; justify-content: space-around; font-size: small;"> <span>(Printed)</span> <span>(Signature)</span> <span>(Signature Date)</span> </div> Assigned Data Group for HPGe from WAO : _____																									